

middle yellow ; scutel sometimes piceous : elytra yellow-ochre, suture piceous, humeral spot brown ; striæ punctured, brown and oblique next the suture : underside black : length $1\frac{1}{4}$ line.

This little insect, which has been confounded with *C. pusillus* of Fabricius, has a wider and longer thorax and is well distinguished by its dark palpi and channeled face. I always find it in August on grass or herbage, and have never met with any variety as in the allied species, which is common on sallows in June. *C. ochraceus* is abundant at the side of the Avon near St. Vincent's Rocks ; the sand hills, Sandwich ; at Mickleham ; Bungay Common, Suffolk ; and Mr. Dale has met with it near Carisbrook Castle.

GENUS 433. CHRYSOMELA.

22. *Sparshalli*. Smooth, shining, violaceous ; thorax margined, with a few large punctures on each side : elytra orange colour ; sparingly and irregularly punctured, the punctures all black, scutellum and suture also black : length 4 lines.

Taken near Epping by Mr. Doubleday, and is preserved in the collection of the late Mr. J. Sparshall of Norwich.

XXXIII.—*Information respecting Botanical and Zoological Travellers.*

Mr. Schomburgk's recent Expedition in Guiana.

[Continued from p. 35.]

It has been suspected that there exists a species of Otter in the rivers of South America which is undescribed. The difficulty connected with procuring these animals, and the absence of references to consult whether there were any specific differences between the two species which inhabit the rivers of Guiana and those which are already described, prevents me from giving it as my firm opinion that the Otters of Guiana are identical with *Lutra brasiliensis* of Ray, and *Lutra enudris* of F. Cuvier. Naturalists know very little about the habits of the South American Otters, nor is it ascertained that the species which is described by Azara is identical with the *Lutra brasiliensis*. The note which I select from my journal, although meagre in itself, may prove nevertheless acceptable, until we have a more perfect knowledge of their character.

During our first ascent of the river Essequibo we did not meet any Otters until we had passed the river Siparuni, and approached the island Tambicabo. We saw first only one, swimming like a dog, with the head and neck out of the water ; but more and more made their

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appearance, until their whole number amounted to about twelve. They were approaching our canoes, now raising themselves partly out of the water, accompanying this motion with a loud snore or an angry growl, or diving rapidly under water, and reappearing a few moments after some distance behind our canoes. Our Indians commenced a shout, striking repeatedly with the hand against their throat, by which a sound not unlike to the growl of the Otter was produced. This attracted their curiosity; and ranging themselves in a line, they came nearer, and were within the reach of the gun, when the very act of raising it induced them to dive, with the exception of the furthest, which, more courageous than the others, continued to advance until it received the discharge. It sunk immediately; but although the water was coloured with blood and proved that it had been wounded, we did not succeed in securing it.

We met them afterwards frequently, but always in small societies; and the first token that they were near us and that we had been reconnoitred by them, was that peculiar snore which may be heard at some distance. I have known them to come so near our canoes that the Indians attempted to strike them with the paddles. This was, as it might have been expected, a vain attempt, as they dive with the greatest rapidity, and are able to remain under the water for a considerable period before they rise to take breath. We frequently surprised them while occupied in feeding upon the fish which they had caught: their retreat was then most rapid, but always in single file and directed towards the river, into which they glide dexterously, and where they dive under instantly for greater security. We have seen them ascend the banks with equal dexterity. They have their certain haunts, where, when they have been successful, they devour their prey, leaving the heads, tails, and fragments of fish, which infect the environs with an insupportable smell. The Otters of Guiana choose for their retreat holes near the banks of the river, but they are known sometimes to take refuge in hollow trees. Their haunts are easily known by a strong and disagreeable smell, in some instances so strong that we increased by all means in our power the speed of the canoes to get out of its precincts. The lesser species hunt in small packs of eight or ten, and swim mostly against the stream; of the larger species I have seldom seen more than two together. As they dive to a great distance and are able to remain under water for six to eight minutes, what fish passes over them at that time is sure to fall a prey to their voracity; they seize them at once by the belly and drag them on shore, where they are deposited while they continue their pursuit. The Indians, who are aware of this, watch their success in

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ambush, and secure what the Otters bring ashore. They attack sometimes fish of considerable size. We watched a pack of Otters at the Great Cataracts of the Corentyn, where, at the basin which one of the cataracts formed, they appeared to carry on their pursuits with great success. One had secured a Haimura at least from ten to twelve pounds weight, and carried it in its mouth to a rock which was partly over water. Here it began devouring its prey without taking much notice of us, although we were not twenty yards from it on the opposite shore. It did not care for our shouting; its success was however disputed by the Indians, who got into the canoe and paddled so rapidly towards the rock, that the Otter saw itself obliged to retreat and to leave the better half of the fish to the Indians. Although the Otters were numerous round the rock, none of them showed any intention to share the prey with the successful hunter or to dispute its possession.

I have already alluded to their having their holes on the edge of rivers, sheltered by the impending bank. Every rock in the vicinity of their residence bears the mark of their excrements; and their feeding-places are so devoid of vegetation, if we except the larger bushes and trees, that they cannot be mistaken, even if the number of scales and fish-bones did not point out the frequency of their visits. A complete path leads up to these places, which, in consequence of their ascending and descending in single file, is hollowed out.

The young remain for a considerable time under the protection of their parents, the mother teaching them to plunge and dive at approaching danger. Abbé Ricardo, who wrote in the middle of last century a treatise on the South American Otter, and who, in order to study their manners the more effectively, caused a large cage pond to be erected in Caraccas*, relates, that while the parent Otters are in existence, they do not suffer the young to propagate their species. I cannot vouch for the truth of this assertion, nor could I make myself sufficiently understood to the Indians to elicit their corroborative testimony to that effect; but thus much is certain;—that in the same community there are Otters of all sizes, and apparently of three or four different generations.

We had entered the upper Essequibo by its tributary the Cuyuwini, and passed at the foot of a ridge of mountains, when we observed on a large ledge of rocks a family of Otters, consisting of about fifteen, including old and young. At our approach they broke

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out into their peculiar noisy cry, and the parents seizing the young with their mouth they plunged into the water and disappeared,—and having placed their young in security, we saw them shortly after reappearing at the head of our canoe. They raised themselves with half their body out of the water, snoring for rage and showing their formidable teeth. At approaching danger or when apprehensive of it, they collected in a body, deputing the most courageous in advance; as our canoe came nearer, they sank under as if by a preconcerted sign, and appeared the next moment within a few yards of it. We saw nothing again of the young; but the adults and larger-sized young ones accompanied us, threatening and snoring, until no doubt we were so far out of reach of their stronghold that they considered their progeny now safe. In other instances, when we attempted to find out their holes, they became so outrageous that they bit our paddles and left the print of their teeth. The Indians know nevertheless how to surprise the young ones, who are then taken home alive, and become in a short time so tractable that they follow their masters like dogs. I have seen them frequently in the Indian cabins, where they were fed on fish, meat, and fruits. In two different instances I possessed one myself, but they both met with an untimely death. The first was left at the water's edge on breaking up our camp, and not missed until evening, when the distance was too great to return for it; and the second was given to the care of an Indian woman from the interior, who visited the coast for the first time in her life. She had been accustomed to keep the young Otter in a large open basket, which she placed in the river at a short distance from shore, fastening it to a stake for greater security. Unacquainted with the rise of the water caused by the flood-tide, she did the same at the lower Corentyn; and we did not become aware of it until our attention was attracted by her distress, when she observed the water several feet above the utmost point where the string would have allowed the cage of the poor Otter to float. In both instances the young Otters were quite tractable and attached to those who nursed them. Their cry when angry or in pain was most plaintive, sometimes piercing and disagreeable. They appeared to be fond of being carried into the water, and would float motionless, their head merely above the surface.

In Colombia the hunting of the Otter forms a great amusement, and is continued for a considerable period. In the month of May the parties assemble, and having ascended the rivers and falls until they reach the clear waters without current, they encamp. The dogs which have been trained for the purpose of hunting the Otter

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are taken in a light canoe, which is manned by the hunters, each armed with an otter-spear, barbed like a harpoon and provided with a handle about ten feet long. An experienced Indian occupies the bow and cheers the dogs, who no sooner wind the game than they give cry. On arriving at the burrows or *Calle Pero* (Otter city), the land party divide into three: one watches, the other occupies that part at the bank of the river which contains the holes, while the third pokes his spear into the holes to eject the occupants. As soon as an Otter is started the hounds are again in full cry; and some of the smaller species of dog, of which there are several in the canoe, are let loose to dive after it: in this they relieve each other; as soon as one is up another goes down; and although the Otter has larger lungs than most other quadrupeds, and can remain comparatively for a longer period under water, it is at last obliged to seek for shallow water or the shore, where the hunters are ready to despatch it with their spears. After the old Otters have fled, the young ones retreat to the uppermost recesses of their holes, where they are dug out, and secured for the purpose of taming; or, which is the case more frequently, they are killed by a slight blow on the forehead.

When hard pursued on land, they frequently double or evince other cunning tricks to elude their pursuers. I shall never forget the sight of an Otter-hunt in the river Tacutu. Although almost crippled by the merciless bites which the sand-flies had inflicted during my stay in Esmeralda, urgent business made it necessary that I should proceed after my arrival in Fort Saõ Joaquim without delay to Pirara. I could neither ride nor walk, and the rivers were then so low that it proved impossible to ascend the Tacutu in a larger canoe: a small hunting-craft, which afforded sufficient room to stretch myself horizontally, and which could be dragged by main force over shallows and sand-banks, offered the only means for executing my design.

We were thus toiling one morning through a small channel, bordered on both sides by sand-banks, when we observed before us a pack of Otters. Our canoe was immediately drawn across, which thus completely barricaded the outlets; while some swift-footed Indians, armed with bludgeons, cut off their retreat by the entrance. The channel expanded and deepened in the middle, and this small basin became now the stronghold of the Otters, into which the Indians rushed for attack; but in spite of their exertions, perhaps intimidated by their furious defence, the adult Otters all escaped, except one, which was now completely hemmed in, and which by every stratagem attempted to escape its assailants. It now plunged into the water, sank under, re-appeared, sought its safety on shore,

are taken in a light canoe, which is manned by the hunters, each armed with an otter-spear, barbed like a harpoon and provided with a handle about ten feet long. An experienced Indian occupies the bow and cheers the dogs, who no sooner wind the game than they give cry. On arriving at the burrows or *Calle Pero* (Otter city), the land party divide into three: one watches, the other occupies that part at the bank of the river which contains the holes, while the third pokes his spear into the holes to eject the occupants. As soon as an Otter is started the hounds are again in full cry; and some of the smaller species of dog, of which there are several in the canoe, are let loose to dive after it: in this they relieve each other; as soon as one is up another goes down; and although the Otter has larger lungs than most other quadrupeds, and can remain comparatively for a longer period under water, it is at last obliged to seek for shallow water or the shore, where the hunters are ready to despatch it with their spears. After the old Otters have fled, the young ones retreat to the uppermost recesses of their holes, where they are dug out, and secured for the purpose of taming; or, which is the case more frequently, they are killed by a slight blow on the forehead.

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We were thus toiling one morning through a small channel, bordered on both sides by sand-banks, when we observed before us a pack of Otters. Our canoe was immediately drawn across, which thus completely barricaded the outlets; while some swift-footed Indians, armed with bludgeons, cut off their retreat by the entrance. The channel expanded and deepened in the middle, and this small basin became now the stronghold of the Otters, into which the Indians rushed for attack; but in spite of their exertions, perhaps intimidated by their furious defence, the adult Otters all escaped, except one, which was now completely hemmed in, and which by every stratagem attempted to escape its assailants. It now plunged into the water, sank under, re-appeared, sought its safety on shore,

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running with rapidity over the sand-bank, although apparently little calculated for it, doubled its track with much cunning, and seeing its attempts frustrated by the wily and light-footed Indians, rushed anew into the water. The dormant savage nature of the Indians once roused, no barrier can be set to it. I had been left in the canoe an unwilling spectator. Much as I found myself amused in the commencement of the hunt, now that their united endeavours to slay fell upon a solitary individual whose intrepidity and cunning had as yet frustrated the execution of their murderous design, it awakened pity. But their blood was up; orders as well as entreaties proved in vain; and perhaps annoyed at the escape of the others, they appeared determined to sacrifice this one to their vengeance for ill success. Its tenacity of life was astounding; it had received several wounds with a cutlass, and succeeded nevertheless for some time in evading the mortal blow, until, chased anew upon the sandbank, it was transfixed by a pointed pole and despatched. It measured about five and a half feet in length, including the tail, which was seventeen inches and a half. The fur was of a dark mouse-colour on the belly and nearly black on the back; the head of a mouse-colour, and on the breast was a large cream-coloured spot; the snout short, whiskers strong, teeth large and powerful, feet short and webbed, tail flattened. Its upper coat of hair was rather coarse, but under it was a coat of the finest fur of a lighter colour. This was the only adult specimen which fell into my hands during my journeys in Guiana, and the want of a fuller or systematic description must be ascribed, partly to the state of suffering in which I then was, and partly to the smallness of the canoe to which I was restricted, and which prevented me from taking with me anything but the most indispensable articles, to the exclusion of any materials for making the necessary use of its capture. It is nevertheless my opinion that the larger species is identical with *Lutra brasiliensis* of Ray and Geoffroy, or Linnæus's *Mustela lutris brasiliensis*, Buffon's *Sarcoviegne de la Guyane*.

I estimate the length of the smaller kind at about four feet, of which the tail is thirteen to fourteen inches. They are of a light mouse-colour, rather reddish on the belly, with the white spot on the breast. In their habits, appearance, and mode of living, they exactly resemble the larger species, and are found in the same situations; but while that species is seldom found in societies, and generally only in pairs, the smaller is decidedly gregarious. I have never succeeded in procuring an adult specimen of the latter for examination. Their head appears broader than in the former species.

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They are equally destructive as the European and Canadian Otters; and, as their depredations continue the whole year, their haunts being never frozen over during the period when Otters of the colder zones feed upon terrestrial animals,—their food is restricted to fish alone, and old Izaak Walton would no doubt have found additional cause to bestow hard names upon these “villanous vermin.”

The fur of the Canadian Otter forms an important article of commerce, and seven to eight thousand skins are annually imported by the Hudson’s Bay Company alone. The skin of the Otter of Guiana has, by competent judges, been pronounced equal in quality; and it might prove of advantage to hunt it for the sake of its skin. General Parr’s cavalry used them for pistol covers and foraging regimental caps.

The Arawak Indians of Guiana call it *Assiero*; the Caribisi, *Avaripuya*; the Tarumas, *Carangueh*; the Warraus, the smaller species *Etopu*, the larger *Itsha-keya*; the Macusis, the first *Dura*, the latter *Maparua*. In the colony they are known by the name of Water-dogs, bearing some resemblance to the canine race when swimming.

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Dr. Turton’s ‘Manual’ has long been known as a useful companion to the student of British land and freshwater shells, although in its original state it must be admitted to have been defective in much of that varied information which the more advanced state of our knowledge in this, as in other departments of natural history, imperatively demands. In the present edition Mr. Gray (on whose recent appointment to the Keepership of the Zoology in the national collection we have to congratulate the Museum and the country) has fully supplied the deficiency, and has produced a work of a very different and far higher character, which except in name, in a portion of the descriptive letter-press, and in the greater part of the figures accompanying it, may be regarded as entirely new.

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